

peculiar rapid vibratile motion. The vertebral column was continued in it quite to its extremity. These young fishes therefore were essentially identical in their tails with the Palæozoic species, and in one genus of the Old Red Sandstone, named *Glypticus*, as stated by Prof. Agassiz, the tail was similar in the form of the lobes. This supernumerary lobe disappears as the fish grows older. Prof. Agassiz observed, that this was among the many facts which show that the order of succession of animals in past time is exemplified now in the development of individuals. He also remarked on the fact that these Ganoid fishes resemble reptiles in the power of moving the head on the back-bone (owing to the ball-and-socket joint of the vertebræ), and in the quasi tail.—*Silliman's Journal*, Nov. 1856.

METEOROLOGICAL OBSERVATIONS FOR DEC. 1856.

[The insertion of carefully prepared Meteorological Reports in the principal daily Papers has rendered our Table and Observations, which from the nature of our publication cannot appear within less than a month after date, of so little value, that the Editors have determined to discontinue them. In doing so they beg to return their thanks to those gentlemen who for so many years have kindly contributed the information.]

*Chiswick*.—December 1. Severe frost: fine, but cold. 2. Clear and frosty. 3. Rain. 4. Frosty and foggy: rain. 5. Foggy and drizzly: rain at night. 6. Densely clouded: rain. 7. Boisterous: cloudy: fine. 8. Densely overcast: cloudy: rain. 9. Fine: cloudy: rain at night. 10. Rain: densely clouded. 11. Partially overcast: fine: rain at night. 12. Clear: very fine in forenoon: cloudy at night: heavy rain. 13. Rain: cloudy and fine. 14. Slight rain: cloudy and fine. 15. Clear and fine: frosty at night. 16. Sharp frost: clear: foggy. 17. Frosty and foggy: cloudy at night. 18. Hazy: drizzly: slight rain. 19. Clear and fine throughout: slight frost at night. 20. Frosty: hazy: cloudy. 21. Overcast. 22. Cloudy. 23. Partially overcast: clear: cloudy. 24. Rain: clear and very fine: frosty at night. 25. Foggy: sharp frost. 26. Cloudy: frosty. 27. Clear and frosty: severe frost at night. 28. Frosty: clear: sharp frost. 29. Clear and frosty: overcast. 30. Hazy. 31. Cloudy.

Mean temperature of the month .....	39°·03
Mean temperature of Dec. 1855 .....	33·99
Mean temperature of Dec. for the last thirty years .....	39·48
Average amount of rain in Dec. ....	1·479 inch.

*Boston*.—Dec. 1. Fine. 2. Fine: snow P.M. 3, 4. Fine. 5. Cloudy: rain A.M. 6. Fine; rain P.M. 7. Cloudy: rain A.M. and P.M. 8, 9. Cloudy. 10. Cloudy: rain A.M. 11. Cloudy: rain P.M. 12, 13. Fine: rain P.M. 14–16. Fine. 17. Cloudy. 18. Cloudy: rain A.M. 19. Fine. 20. Cloudy. 21. Cloudy: rain P.M. 22–26. Fine. 27. Fine: snow P.M. 28. Fine. 29. Fine: rain P.M. 30. Cloudy. 31. Fine.

*Sandwick Manse, Orkney*.—Dec. 1. Bright A.M.: clear P.M. 2. Snow-showers A.M.: clear P.M. 3. Cloudy A.M.: showers, thaw P.M. 4. Snow-showers A.M.: rain P.M. 5. Drops A.M.: rain P.M. 6. Showers A.M. and P.M. 7. Cloudy A.M.: showers P.M. 8. Cloudy A.M.: clear, fine P.M. 9. Cloudy A.M.: rain P.M. 10. Damp A.M.: showers P.M. 11. Cloudy A.M. and P.M. 12. Cloudy A.M.: fine, showers P.M. 13. Cloudy A.M.: fine, clear P.M. 14. Showers A.M.: cloudy P.M. 15. Cloudy A.M. and P.M. 16. Cloudy A.M.: showers P.M. 17. Cloudy A.M.: damp P.M. 18. Showers A.M.: clear P.M. 19. Drizzle A.M.: cloudy P.M. 20. Drizzle A.M. and P.M. 21. Drizzle A.M.: rain P.M. 22. Hail-showers A.M. and P.M. 23. Snow A.M. and P.M. 24. Thaw A.M.: cloudy, sleet P.M. 25. Frost, bright A.M.: snow-showers P.M. 26. Frost, bright A.M.: snow-showers P.M. 27, 28. Hail-showers A.M. and P.M. 29. Bright A.M.: drops P.M. 30. Showers A.M.: drizzle P.M. 31. Drizzle A.M.: rain P.M.

Mean temperature of Dec. for previous twenty-nine years ...	40°·97
Mean temperature of this month .....	39·38
Mean temperature of Dec. 1855 .....	39·41
Average quantity of rain in Dec. for sixteen previous years ...	4·23 inches.